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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,488	11/25/2003	Yasushi Sayama	2038-309	4367

22429 7590 07/13/2005

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EXAMINER

EVANS, CHIVONNE LAURIE

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/720,488	<b>Applicant(s)</b> SAYAMA ET AL.	
	<b>Examiner</b> Chivonne L. Evans	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: in the specifications, the applicant interchanged the corresponding numbers to the figure of the front wing and the rear wing. (pg 15, line 19 and pg 16, lines7)

Appropriate correction is required.

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is objected to for including legal phraseology "means," in lines 7 and 9.

3. It is noted that the terms "first fastener means" and "second fastener means" are utilized in the claims. Since the terms are not in "means for" format, they are not considered to be in 112 6th paragraph format.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 3, 5, 9, and 10 rejected under 35 U.S.C. 102(b) as being anticipated by Pozniak et al (6099516). Pozniak teaches a diaper with a front waist region (Figure 1, 10) and rear waste region (Figure 1, 14) and a crotch region (Figure 1, 18). Pozniak teaches a diaper having stretchable flaps or tabs (Column 8, lines 14-17 and column 2, line 58), (whereas a wing is defined as a side or subordinate extensions). The flaps, or extensions, have a frictional element (column 2, line 34 and Figure 2, 34) as well as a hook and loop fastener located at the distal end of the tab or flap (Column 2, line 29 and Figure 3, 40). The anti-slip zone that Pozniak teaches is a stretchable friction zone located on the outer cover (Column 3, lines 17-25 and Figure 1, 22); the opposite lateral zone (front region 14) is broadened to form an extension, or wings, on the side (Figure 1, 10). The frictional zone adapted to come in contact with the flaps exhibited by Pozniak, maintain a frictional force of 0.5N or higher under a load of 58.23 g/9cm<sup>2</sup> and a frictional force of 5N or lower under a load of 340 g/9cm<sup>2</sup>. This was determined using the coefficient of friction of 1.5 taught by Pozniak and the equation for frictional force calculation well known in the art. (\* Please see below for detailed calculations). Also, Pozniak discloses elastic members along the waist (Figure 6, 31A) and leg elastics (Column 7, 30-35 and Figure 6, 28) and continuous elastic fibers made of plastic elastomer and continuous thermoplastic material (Column 8, lines 30-38).

\*Frictional Force = Coefficient of friction \* mass of solid \* gravity

\*i.e. Frictional Force under 340 g = 5.00N

***Claim Rejections - 35 USC § 102/103***

A.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

B.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claims 4, and 6-8 rejected under A.) 35 U.S.C. 102(b) as anticipated by or, in the alternative, under B.) 35 U.S.C. 103(a) as obvious over Pozniak et al (6099516).**

7. A.) It is disclosed by the applicant in the specifications (page 12, lines 16-21) that if the content of elastic fibers in the fibrous mixture is not within 50-80%, then the desired friction will be too low or too high. Pozniack teaches a fibrous mixture that has a frictional value proved above to fall between, if not exact, the values stated by the applicant. Therefore, it is inherent that the fibrous mixture ratio that Pozniack teaches has to be consistent with the applicant's ratio in order to produce the frictional force that is disclosed by the applicant. Also, the lengths of the fibers disclosed by the applicant constitute an inelastic and elastic mixture of continuous and short fibers, which is also

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disclosed by the applicant, to prevent lifting of the fibers when the wings and the anti-slip surface are in contact with each other. Pozniack teaches a friction zone without any "tackifying agents" (Column 2, lines 52-53) whereas "tackifying" is defined as having loose or sticky fibers, therefore creating a surface to supplement the securing zone - not attached to the diaper in an adhesive manner. Therefore, it is inherent that the length of the fibers used in the materials disclosed by Pozniak was composed of continuous and short fibers, meaning that they were fibers of the length of 5-100 mm, as disclosed by the applicant. Also, the material in the anti-slip zone (outer cover) can be formed by bonding (Column 6, lines 5-6), as taught by Pozniak and the materials of the cover, and the frictional element (tab or flap) can be of similar composition to the outer cover meaning that the melting points will be the similar (Column 8, Lines 14).

B.) In the alternative, the claims are also obvious over Pozniak et al (6099516). Although Pozniack lacks the specified values for the length of the fibers, the examiner takes Official Notice that it is well known in the art to vary the size of the fibers (i.e. polymer laminates) to prevent the uplifting of fibers when in a frictional surface contact environment and it is well known in the art, as Pozniak also implies (Column 8, lines 19-58), to vary the ratio composition of inelastic to elastic materials to achieve an optimal frictional force; therefore creating anti-slip surface-to-surface contact. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide Pozniacks' diaper with the claimed fiber mixture of 50-80% and

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fiber lengths between 5-100 mm in order to obtain a desired security and comfort of a diaper.

**Conclusion**


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kling (5858013), Olson (6905488 B2), Roessler (0114826) are all art related to the application. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chivonne L. Evans whose telephone number is 571-272-8686. The examiner can normally be reached between the hours of 7:30-3:30, Monday –Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**TATYANA ZALUKAEVA**  
**PRIMARY EXAMINER**



  
Chivonne L. Evans  
Examiner  
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